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THE POISONED CITY: FLINT'S WATER AND THE AMERICAN URBAN TRAGEDY

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Flint: An American Failure

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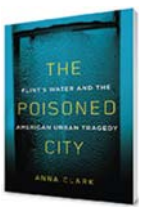
WHAT THE EYES DON'T SEE: A STORY OF CRISIS, RESISTANCE, AND HOPE IN AN AMERICAN CITY
By Mona Hanna-Attisha
New York (NY): One World, 2018
384 pp., $28.00

THE POISONED CITY: FLINT'S WATER AND THE AMERICAN URBAN TRAGEDY
By Anna Clark
New York (NY): Metropolitan Books, 2018
320 pp., $30.00



The story of Flint—the Michigan city in which people were harmed by drinking water that contained lead and lethal bacteria—is a warning to all struggling US communities that confront disinvestment, declining population, excessive financial focus, incompetent leadership, nontransparent government, and racism. Flint is also a tale of a persevering community, good doctors and scientists, and courage. The various facets of this story were captured ably in two recent books: *What the Eyes Don't See*, by physician Mona Hanna-Attisha, and *The Poisoned City*, by journalist Anna Clark.

As cities and states go, Flint and Michigan could be considered all-American. From the 1930s to the 1960s Flint's average incomes were among the highest in the country, thanks to a powerful company (General Motors [GM]) and the United Auto Workers union. The Buick plant in Flint was at one time the largest factory in the world, and Michigan was critical to US production needs in World War II. The automotive industry had made many people in Michigan wealthy and created a strong middle class, though African Americans did not fare as well as others. For example, when GM built affordable worker housing in Flint, blacks were mostly excluded, both Clark and Hanna-Attisha report.

In the postwar era the movement of more prosperous white people from older cities to the suburbs was accelerated due to easy highway access, lower taxes, cheap fossil fuels, and racism. Meanwhile, the very limited housing and job options for poor black people fueled inner-city riots. Over the same period, the auto companies—the economic engine of the city—were closing manufacturing plants and moving to areas with lower material and labor costs.

Flint's population, which peaked at 200,000 in 1960, was about 96,000 in 2017, according to Census Bureau estimates. As the population declined, tax revenues followed, while the state also suffered shortfalls and reduced its support for struggling cities. As Clark writes, Flint was in deep deficit by 2011 when the State of Michigan Public Act 4 enabled Gov. Rick Snyder to appoint a fiscally focused emergency manager to prevent the city's bankruptcy. While Flint had an elected mayor and council, sweeping powers were held by the state-appointed emergency manager, including "to reject, modify and terminate contracts including union agreements," Clark writes. Other struggling cities were in the same position. According to *The Poisoned City*, "by 2017 52 percent of African Americans in Michigan were being governed by an appointed Emergency Manager"—in essence, their votes in local elections were irrelevant—whereas only 2 percent of white residents were so disenfranchised.

Michigan, nicknamed the Great Lakes State, is surrounded by one-fifth of the world's fresh water. Lake Huron supplied excellent drinking water to cities including Detroit and, beginning in 1964, Flint. Sixty percent of Flint's water was used by the auto plants. As Flint's population declined, the per household costs of water service increased. In a city where 80 percent of the residents earned less than $40,000 a year and 40 percent earned less than $15,000, the average household cost for water and sewage was over $1,500 per year. Flint was paying millions to Detroit to draw fresh water from Lake Huron, treat it, and pipe it to Flint. A half-century earlier, Flint had had its own water treatment plant on the nearby Flint River, and to save money, the city decided to recommission it. Complicating this plan was the need to upgrade the old plant, switch to a newer (but more corrosive) chloramine disinfection system, and hire additional water engineers. Flint nevertheless switched back to its river water in 2013. Soon, complaints began about the water's taste, odor, and color, and within weeks people reported unpleasant effects such as skin rashes. The nearby Chevrolet plant stopped using Flint water because of its corrosive effects on engine blocks. When water testing was performed, Hanna-Attisha reports, inspectors flushed cold water as long as fifteen minutes to get contaminant levels lower. The city and state said that the samples they took met official standards and assured everyone the water was fine.

Hanna-Attisha was head of the pediatric residency program at Flint's Hurley Medical Center and heard concerns about the water from the new mothers she was caring for. As a pediatrician, she knew that on a weight basis, infants drink three to four times as much water as adults, and that growing brains and bodies were more sensitive to toxic elements such as lead. Lead damages many

organs, and the damage to the developing brain can be lifelong. Many of Hanna-Attisha's patients were fed with powdered infant formula, which is reconstituted with tap water. On the basis of the government reports, Hanna-Attisha assured mothers that using formula was safe.

However, she soon learned from a close friend of the work of a groundwater regulations manager at the US Environmental Protection Agency, Miguel Del Toral. In an eight-page memo in June 2015, Del Toral had warned about health hazards from "high lead levels in Flint." The Michigan Department of Environmental Quality did not respond, Del Toral was reprimanded within the EPA for overstepping his role, and an ethics complaint was filed against him. The lead levels in the water were high because of something every water engineer knows: Old pipes can leach lead into water, especially when using chloramine disinfection. Failing to use corrosion control compounds was engineering malpractice, in my view. The water was unfit to give to an infant or anyone else, especially straight from the tap. People do not run the tap for fifteen minutes to get water when they are thirsty or to cook, wash, or shower.

What the Eyes Don't See records Hanna-Attisha's awakening to the danger of the water and the ineffectiveness of the public health bureaucracy. When she called the Genesee County Health Department's Childhood Lead Poisoning Prevention Program (a statewide initiative) to report high levels of lead in the water, she was told that water was not their responsibility. When she asked the state program that is mandated to collect child blood lead test data for Flint-specific data, she got a runaround. When she was finally given a copy of a one-page document, it seemed to show no increase in Flint children's blood lead levels. She quickly realized that the summary lumped together unequally exposed people, diluting findings from the most affected neighborhoods. She recruited a colleague skilled in geographic information system technology and found that blood lead levels were indeed higher in certain blocks. She was sleepless, exhausted, and "terrified," she writes, but she bravely announced her results at a press conference. Though she was initially accused of "splicing and dicing" the data, the findings were determined to be robust, and Flint became a national story.

Anna Clark's exquisitely documented reporting in *The Poisoned City* is a powerful complement to Hanna-Attisha's medical and personal odyssey. Just as soldiers rarely understand the battles in which they served until years later, Clark's historical eye delineates the upstream causes of avoidable human harm. The story of Flint is about more than bumbling bureaucrats; Flint is also the collision point for neglected and deliberately hidden forces. Most of the people who failed the residents of Flint focused on one narrow outcome, such as finances or water tests, and while some were negligent or lazy, few thought of themselves as racists. But the exclusion from good housing, fair mortgages, and decent schools meant that the largely African American population in Flint did not have the assets to move on when GM did. The abandonment of Flint might not have been consciously racist, but as the Michigan Civil Rights Commission comments in its report on Flint, "colorblindness is racism." And as the filmmaker Michael Moore noted, this would not have occurred in the wealthier and predominantly white Michigan cities of West Bloomfield, Grosse Pointe, or Ann Arbor.

As Clark reports, Michigan has a culture where "secrecy [runs] deep." Public access to government data is technically difficult, and taxpayers often are told to pay for access to publicly funded health and environment data. Michigan ranked "dead last" of all the states in the 2015 State Integrity report card from the Center for Public Integrity, with particularly low marks for access to information, Clark adds. Openness was an "at will gesture," Clark notes, and high-ranking officials had legal immunity for decisions, while those in the lower ranks could be charged with gross negligence for decisions of far less importance. I find that when administrative structures demand that their staff members focus narrowly and are told to "stay in your lane," the big problems get neglected.

Students, elected officials, historians, and health professionals can learn much from Mona Hanna-Attisha's *What the Eyes Don't See* and Anna Clark's *The Poisoned City*. More to the point, policy leaders need to learn from Hanna-Attisha's experiences, and clinicians need to learn from Clark just how much of the illness that presents before them is driven by seemingly remote, but destructive, policy decisions. ■

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